

III. REMARKS

In the Office Action, objection was made to claim 18 because of an apparent dependency on itself. Claim 18 has been amended to remove the dependency on itself, thereby to overcome this objection. Claims 1-20 were rejected under 35 U.S.C. 102 as being anticipated by Mizell (US 2002/0077097) for reasons set forth in the Action.

The claims have not been amended except for the clarification in claim 18. In claim 18, reference is made to two radio access networks, wherein the first of the networks is referred to as "radio access network" and the second of the networks is referred to as "other radio access network".

The following argument is presented to overcome the foregoing rejection of claims 1-20 over the teachings of Mizell, and to show the presence of allowable subject matter in the claims.

With respect to the subject matter of the claims, both method and apparatus claims are present. Claim 1 is directed to a method for assigning values of service attributes to transmissions between a user equipment and a radio access network. The method of claim 1 comprises the following steps/features:

A Determining, upon request of a transmission by a user equipment of a subscriber registered with some radio access network, values of service attributes to be used for the transmission requested by the user equipment;

B The values are determined based on at least one value of at least one service attribute defined by a stored subscriber specific service profile; and

C The values are determined based on at least one stored common value of at least one service attribute.

The foregoing steps/features enable the invention to accomplish its object of enabling an improved assignment of values of service attributes to transmissions requested by a user equipment (present specification, paragraph connecting pages 6 and 7).

With respect to the apparatus claims, independent claim 14 is directed to a radio access network, independent claim 16 is directed to a network element of a radio access network, independent claim 17 is directed to a radio access network wherein subscriber user equipment is registered with some other radio access network, and independent claim 20 is directed to a network element of a radio access network wherein subscriber user equipment is registered with some other radio access network. The apparatus claims include means for determining values of service parameters in accordance with the method of claim 1.

The Teaching Of Mizell

With respect to the cited art, Mizell relates to provision of QoS for a given mobile terminal by assigning a temporary logical link identifier (TLLI) in a manner that reflects a QoS rating for a mobile terminal (par. 14). Mizell discloses (par. 27-31) an embodiment with a GPRS network comprising an SGSN, an MSC/VLR, an ANSI HLR, and a GPRS HLR.

In Mizell, whenever a mobile terminal registers with the network through a base station, the base station transmits identity information of the mobile terminal to the SGSN. The SGSN responds by assigning a TLLI to the mobile terminal. As part of assigning the TLLI, the SGSN examines the mobile ID to determine a quality of service rating. Alternatively, the SGSN examines the type of call being placed by the mobile terminal. The base station then transmits data and assigns traffic channels according to a QoS rating implied by the TLLI number. Similarly, the mobile terminal transmits data on the reverse link according to the QoS that is implied by the TLLI number (par. 32). Furthermore, a memory includes profile information and logic for obtaining profile information from an external system such as an HLR (par. 34).

Operation in the Mizell mobile terminal upon receipt of a determined TLLI is described in par. 38. Whenever a mobile terminal registers its presence within the mobile network, the SGSN receives the registration information from a base station, extracts the MSID from the registration information, and examines the mobile profile to determine the QoS rating for the mobile terminal (par. 40).

In Mizell, the QoS rating may be, or may be exclusively a function of whether the call is a voice call or a data call. Alternatively, the QoS rating may be a function of the mobile station ID as well as a function of the type of call being placed. Further, the QoS rating may be a function of the QoS requested by the mobile terminal for a particular call. Finally, the QoS may be exclusively due to a subscription plan that categorizes the mobile terminal's QoS rating (par. 41).

Novelty And Non-obviousness

In the rejection of claim 1, the examiner relies on Mizell par. 32, 38 and 41. Mizell is distinguishable from the present invention in that Mizell selects a QoS rating and then uses apparently values of service attributes predefined for the selected rating (par 32). Such a rating is one value associated via a certain TLLI to a specific set of service parameter values. Thereby, different factors, such as subscribed values and common values, may not influence the values of different service parameters separately, but may influence only a selection of a specific predefined set of service parameter values.

The method of claim 1, in contrast, allows selection of the value of each employed service attribute individually based on the available subscribed values (feature B, above) and the available common values (feature C). Thus, the solution of claim 1 is more flexible than the solution of Mizell. This is of particular interest for UMTS, in which a large number of parameters is defined (paragraph connecting pages 3 and 4 of the present specification). Contrary to the indication by the examiner concerning claim 9, UMTS is not dealt with in Mizell, only GPRS (par. 27-29), which constitutes a packet switched service in a GSM network.

Further, if a subscription plan is used for determining the QoS rating in Mizell, the subscription plan is explicitly used exclusively for determining the QoS rating (par. 41). Thus, the teachings of Mizell do not allow consideration of interdependencies or possible conflicts between subscribed values and e.g. common values stored for a requested type of transmission. According to present claim 1, in contrast, subscribed values and common values are considered (features B

and C, above). Therefore, it must be concluded that the subject matter of present claim 1 is new and is not obvious over Mizell.

The other independent claims 14, 16, 17 and 20 all comprise means for determining values of service attributes based on given values of service attributes, not based on QoS ratings. Further, they all require a consideration of subscribed values and stored values. Thus, the same comments apply as for claim 1, so that these claims are believed to recite patentable subject matter, not suggested by Mizell.

The dependent claims are also distinguishable from Mizell. Concerning claim 4, the examiner refers to par. 40/41 of Mizell who mentions a mobile profile which allows determination of an QoS rating for the mobile terminal, and moreover a subscription plan. There is no indication, however, that this mobile profile or this subscription plan defines the best values (or the highest QoS rating in the terms of Mizell) allowed for a transmission. The mobile profile is not said to contain any subscription information, and the subscription plan can only be used exclusively. The QoS rating in the subscription plan is thus to be used as QoS rating, the value of service attributes are not selected based on best values as in claim 4.

Concerning claims 5-6, the examiner refers to par. 40/41 of Mizell who mentions that a mobile profile and/or the type of a call or a subscription plan may be the basis for a QoS rating. It is not mentioned, however, that the stored subscription plan defines the QoS for a specific kind of transmission, as for real-time-traffic transmissions or for non-real-time-traffic transmissions. Thus, the features of claims 5 and 6 are not disclosed by Mizell.

Concerning claim 7, the examiner refers to par. 38/40/41 of Mizell who does not mention a default value or even a default QoS rating. How the QoS rating is determined if it is a function of both, a mobile profile and a requested call, is not indicated in more detail (par 40, 41). Paragraph 38, which is mentioned by the examiner in addition, only describes that the mobile terminal transmits data packets having a QoS characteristic corresponding to a received TLLI indicating a selected QoS rating. Thus, the features of claim 7 are not disclosed by Mizell.

Concerning claim 8, the examiner refers to Fig. 4 of Mizell who does not teach where the common values and the subscriber plan are stored.

Concerning claim 9, the examiner refers to par. 27-29 and to Fig. 1 of Mizell who mentions only GPRS and does not mention UMTS.

Concerning claim 10, the examiner refers to par. 29-32 and 40 of Mizell. It does not become apparent from the cited paragraphs that a HLR can be part of a first radio access network and the SGSN be part of a second radio access network.

Concerning claim 11, the examiner refers to par. 31, 40 and 41 of Mizell. An authentication is not mentioned explicitly in these paragraphs.

Concerning claims 12 and 18, the examiner refers to par. 32, 38, 40 and 41 of Mizell. A mapping of values of service attributes (or at least QoS ratings) defined in a first radio access network to values of service attributes defined in a second radio access network is not disclosed in the cited paragraphs. Only a mapping

from a QoS rating to a TLLI is performed, which is not network related. Par. 38 describes only some kind of mapping within a mobile terminal. Thus, the features of claim 12 are not disclosed by Mizell.

Concerning claim 15, the examiner refers to par. 30/31 and Fig. 1 of Mizell. It is not mentioned explicitly where the subscription plan is stored.

Concerning claim 19, the examiner refers to par. 7 and Fig. 1 of Mizell. A wireless local area network and a PAC, however, are not mentioned.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

A check in the amount of \$110.00 is enclosed for a 1 month extension of time. The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,



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